

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/001,489
		Filing Date	10/23/2001
		First Named Inventor	Abdul Malik
		Art Unit	1723
		Examiner Name	Therkorn, Ernest G.
Sheet 1	of 6	Attorney Docket Number	1372.214.PRC

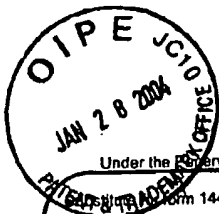
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	AICHHOLZ, REINER, Preparation of Glass Capillary Columns ... Journal of High Resolution Chromatography, Vol. 13, pp. 71-73 (1990).	
	2	ALLTECH, Chromatography Catalog, pp. 172 (1997).	
	3	ALGELT, KLAUS H. ET AL., Chromatography on Petroleum Analysis, (1979), Marcel Dekker, New Yourk and Basel.	
	4	BELARDI, ROBERT P. ET AL., The Application of Chemically Modified Fused Silica ..., 24, pp. 179-191, (1989).	
	5	BEREZKIN, VICTOR G.; DRUGOV, YURI S., Gas Chromatography in Air Pollution Analysis, (1991) Elsevier	
	6	BEREZKIN, VICTOR G. ET AL., Capillary Columns with Several Layers..., Vol. 47, pp. 600-604, (1992).	
	7	BLAU, KARL; HALKET, JOHN M. EDS., Handbook of Derivatives for Chromatography, 2nd ed. (1993), John Wiley & Sons.	
	8	BLOOMBERG, L., Modification of Glass Capillary Columns..., Journal of HRC & CC, Vol. 3, pp. 527, (1980).	
	9	BRINKER, C. JEFFREY ET AL., Sol-Gel Science, Academic Press, (1990).	
	10	BROWN, PHYLLIS R. ET AL., The Separation and the Characterization of Long Chain..., Critical Reviews in Analytical Chemistry, Vol. 21, pp. 193-208, (1989)	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/088 (08-03)

Approved for use through 07/31/2008. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Compl telf Kn wn</b>	
		Application Number	10/001,489
		Filing Date	10/23/2001
		First Named Inventor	Abdul Malik
		Art Unit	1723
		Examiner Name	Therkorn, Ernest G.
Sheet 2	of 6	Attorney Docket Number	1372.214.PRC

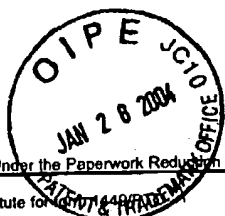
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	11	CLEMENT, RAY E., Gas Chromatography, Biochemical, Biomedical, and Clinical Applicants, (1990), Wiley.	
	12	COLLINSON, MARYANNE M., ET AL., Sol-Gels and Electrochemistry, Analytical Chemistry, Vol. 72, pp. 702A-709A, (2000).	
	13	COULIBALY, KELEGOUN, ET AL., An Overview of Solid-Phase Extraction..., Food Rev. Int., Vol. 12, pp. 131-151, (1996).	
	14	EPA METHOD 604, Methods for Organic Analysis..., Environmental Protection Agency, pp. 58-66, (1984).	
	15	ETTRE, L. S., Performance of Open Tubular Columns..., Chromatographia, Vol. 18, pp. 477-488, (1984).	
	16	ETTRE, LESLIE S., ET AL., Basic Relationships of Gas Chromatography, (1994), Advanstar.	
	17	FERIOLI, V., ET AL., High-Performance Liquid Chromatography..., Chromatographia, Vol. 14, pp. 61-65, (1995).	
	18	FIELDING, M., ET AL. Disinfection By-products in Drinking Water, Current Issues, Royal Society of Chemistry (1999).	
	19	WHO Guidelines for Drinking-Water Quality, 2nd ed., WHO (World Health Organization), Geneva, (1993).	
	20	HAMLET, CHRISTINE, ET AL., Novel Sol-Gel Dendrimer Coatings....	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

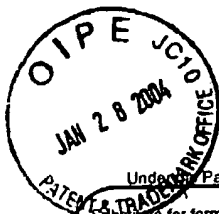
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/001,489
		Filing Date	10/23/2001
		First Named Inventor	Abdul Malik
		Art Unit	1723
		Examiner Name	Therkom, Ernest G.
Attorney Docket Number	1372.214.PRC		
Sheet 3	of 6		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	21	HARTMANN, H., ET AL., Trace Determination of Pesticides..., Fresenius Environmental Bulletin, Vol. 7, pp. 96-103, (1998).	
	22	HARUVY, Y., ET AL., Sol-Gel Replication of Microoptical Elements and Arrays, Chem. Mater, Vol. 9, pp. 2604-2615, (1997).	
	23	HAYES, J.D., ET AL, HPCE-Final Program, pp. 80-81, (1997).	
	24	HAYES, JAMES D.; MALIK, ABDUL, Sol-Gel Monolithic Columns..., Analytical Chemistry, Vol. 72, pp. 4090-4099, (2000).	
	25	JANAK, K., ET AL., Static Coating of Capillary Columns..., Journal of HRC & CC, Vol. 8, pp. 843-847, (1985).	
	26	KATAOKA, HIROYUKI, ET AL., Simple and Rapid Determination of Amphetamine..., Journal of Analytical Toxicology, Vol. 24, pp. 257-265, (2000).	
	27	KOIVUSALMI, EIJA, ET AL., Quantitative RP-HPLC Determination..., Analytical Chemistry, Vol. 71, pp. 86-91, (1999).	
	28	NAWROCKI, J., Silica Surface Controversies..., Chromatographia, Vol. 31, pp. 177-205, (1991).	
	29	LEE, M.L., ET AL, Fused Silica Capillary Column Technology for Gas Chromatography, Journal of Chromatographic Science, Vol. 22, pp. 136-142, (1984).	
	30	LOPEZ-AVILA, VIORICA, ET AL., Evaluation of Soxtec Extraction..., Journal of AOAC International, Vol. 76, pp.864-880, (1993).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.  
 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)

Approved for use through 07/31/2008. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Schedule for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 4

of 6

**Complete If Known**

Application Number	10/001,489
Filing Date	10/23/2001
First Named Inventor	Abdul Malik
Art Unit	1723
Examiner Name	Therkorn, Ernest G.
Attorney Docket Number	1372.214.PRC

**NON PATENT LITERATURE DOCUMENTS**

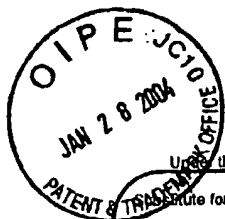
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	31	MACKENZIE, J. D., Hybrid Organic-Inorganic Materials, American Chemistry Society, pp. 227-236, (1995).	
	32	MAJORS, RONALD E., Liquid Extraction Techniques for Sample Preparation, LC*GC International, Vol. 10, pp. 93-101, (1997).	
	33	MINNICH, MARTI M., ET AL., Extraction Methods for Recovery..., Journal of AOAC International, Vol. 79, pp.1198-1204, (1996).	
	34	MUKHERJEE, SHYAMA P., Supercritical Drying in Structural and Microstructural Evolution of Gels; A Critical Review, pp. 747-759, (1988).	
	35	OESTERHELT, G., ET AL., Analyse von Hydroxypivalaldehyd..., Fresenius Z. Anal. Chem., Vol.321, pp. 553-555, (1985).	
	36	PALKAR, V. R., Sol-Gel Derived Nanostructured..., NanoStructured Materials, Vol. 11, pp. 369-374, (1999).	
	37	PAWLISZYN, JANUSZ, Theory of Solid-Phase Microextraction, Journal of Chromatographic Science, Vol. 38, pp. 270-278, (1999).	
	38	REIGHARD, TRICIA S., ET AL., Bridging the Gap Between Supercritical..., Critical Rev. in Analytical Chem., Vol. 26, pp. 61-99, (1996).	
	39	ROTZSCHE, HARALD, Stationary Phases in Gas Chromatography, Journal of Chromatography Library, Vol. 48, Elsevier, (1991).	
	40	SCHEPPERS WERCINSKI, SUE ANN, Solid Phase Microextraction: A Practical Guide, Marcel Dekker, Inc., (1999).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.86. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

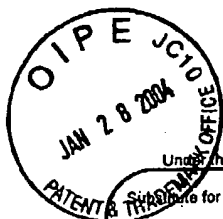
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/001,489
		Filing Date	10/23/2001
		First Named Inventor	Abdul Malik
		Art Unit	1723
		Examiner Name	Therkorn, Ernest G.
Sheet 5	of 6	Attorney Docket Number	1372.214.PRC

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	41	SCHOMBURG, G., ET AL., Alkylpolysiloxane Galss Capillary Columns..., Chromatographia, Vol. 12, pp. 651-660, (1979).	
	42	SHENDE, CHETAN, ET AL., Sol-Gel Poly(ethylene glycol) Stationary Phase..., Analytical Chemistry, Vol. 75, pp. 3518-3530, (2003).	
	43	STARK, F. O., ET AL., The Interactions between Trialkylsilanes and E-Glass..., The Journal of Physical Chemistry, Vol. 72, pp. 2750-2754, (1968).	
	44	FURTON, KENNETH, ET AL., The Use of Solid-Phase..., Journal of Chromatographic Science, Vol. 38, pp. 297-306, (2000).	
	45	VAN DER VLIS, E., ET AL., Combined Liquid-liquid Electroextraction..., Journal of Chromatography A, pp. 333-341, (1994).	
	46	VOROTILOV, K.A., ET AL., ORMOSIL Films: Properties and Microelectronic Applications, Journal of Sol-Gel Sci. and Tech. Vol. 8, pp. 581-584, (1997).	
	47	WANG, DONGXIN, Sol-Gel Chemistry - Mediated Novel Approach to column Technology for High-Resolution Capillary Gas Chromatography, (2000).	
	48	WANG, DONGXIN, ET AL., Preparation and GC Performance of sol-Gel Technology-Based Open Tubular Columns., pp. 505-513, (1996).	
	49	WANG, ZHENYU, ET AL., High-Performance Polyethylene..., Journal of Chromatography, Vol. 893, pp. 157-168, (2000).	
	50	WELSCH, THOMAS, ET AL., The Thermal Immobilization of Hydroxy-Terminated Silicon..., Journal of High Resolution Chromatography, Vol. 14, pp. 153-159, (1991).	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.  
 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/088 (08-03)  
Approved for use through 07/31/2008. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

### Complete if Known

Application Number	10/001,489
Filing Date	10/23/2001
First Named Inventor	Abdul Malik
Art Unit	1723
Examiner Name	Therkorn, Ernest G.
Attorney Docket Number	1372.214.PRC

Sheet	6	of	6
-------	---	----	---

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	51	WESTWOOD, S.A., Supercritical Fluid Extraction and its Use on Chromatographic Sample Preparation, CRC Press, (1993).	
	52	WILKED, G.L., ET AL., "Creamers": Hybrid Materials Incorporating..., Polymer Preprints, Vol. 26, pp. 300-302, (1985).	
	53	WOOLLEY, C.L., ET AL., Deactivation of Fused-Silica..., Journal of Chromatography, Vol. 367, pp. 9-22, (1986).	
	54	WU, JINGCUN, ET AL., Polypyrrole-Coated Capillary In-Tube..., J. Microcolumn Separations, Vol. 12, pp. 255-266, (2000).	
	55	WU, JINGCUN, ET AL., Polypurrole-Coated Capillary..., Analytical Chemistry, Vol. 73, pp. 55-63, (2001)	
	56	YAKABE, YOSHIKUNI, ET AL., Immobilization method for polyethylene..., Journal of Chromatography, Vol. 558, pp. 323-327, (1991).	
	57	ZAPF, ANDREAS, ET AL., GC Analysis of Organic Acids..., Journal of High Resolution Chromatography, Vol. 22, pp. 83-88, (1999).	
	58	ZENG, ZHAORUI, ET AL., Solid Phase Microextraction Using Fused-Silica..., Analytical Chemistry, Vol. 73, pp. 2429-2436, (2001).	
	59	ZHANG, J., ET AL., Development of the Peronsal Aldehydes..., Environmental Science & Technology, Vol. 34, pp. 2601-2607, (2000).	
	60	ZHANG, ZHOUYAO, ET AL., Solid-Phase Microextraction, Analytical Chemistry, Vol. 66, pp. 844A-853A, (1994).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.